

Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definitions
1	BRS	L1	283 molecular adj switch	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:37		0
2	BRS	L2	9218 (transcription factor) or (transcriptional adj regulatory adj protein) or (transcriptional adj regulatory adj factor) or (DNA adj binding adj protein)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:39		0
3	BRS	L3	61 1 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:39		0
4	BRS	L4	10528 regulat\$ same (gene adj expression)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:42		0
5	BRS	L5	1655 4 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:42		0
6	BRS	L6	6863 transgene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:42		0
7	BRS	L7	8 3 same 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:48		0
8	BRS	L8	1 3 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:49		0
9	BRS	L9	11 5 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/08 14:49		0

=> d his

(FILE 'HOME' ENTERED AT 14:55:55 ON 08 JUL 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA'
ENTERED AT

14:56:25 ON 08 JUL 2002

L1 3583 S MOLECULAR SWITCH
L2 350882 S (TRANSCRIPTION FACTOR) OR (TRANSCRIPTIONAL
REGULATORY PROTEIN
L3 221 S L1 (P) L2
L4 64328 S TRANSGENE
L5 5 S L3 (P) L4
L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)
L7 861966 S GENE EXPRESSION
L8 44711 S L2 (P) L7
L9 626 S L8 (P) L4
L10 223 S DNA BINDING COMPOUND
L11 1 S L9 (P) L10
L12 1 S L3 (P) L10
L13 0 S L12 NOT L11

=> log y

FILE 'HOME' ENTERED AT 14:55:55 ON 08 JUL 2002

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'MEDLINE' ENTERED AT 14:56:25 ON 08 JUL 2002

FILE 'CAPLUS' ENTERED AT 14:56:25 ON 08 JUL 2002
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FILE 'SCISEARCH' ENTERED AT 14:56:25 ON 08 JUL 2002
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FILE 'AGRICOLA' ENTERED AT 14:56:25 ON 08 JUL 2002

=> s molecular switch
L1 3583 MOLECULAR SWITCH

=> s (transcription factor) or (transcriptional regulatory protein) or (transcriptional regulatory
3 FILES SEARCHED...
L2 350882 (TRANSCRIPTION FACTOR) OR (TRANSCRIPTIONAL REGULATORY PROTEIN)
OR (TRANSCRIPTIONAL REGULATORY FACTOR) OR (DNA BINDING PROTEIN)

=> s 11 (p) 12
L3 221 L1 (p) L2

=> s transgene
L4 64328 TRANSGENE

=> s 13 (p) 14
L5 5 L3 (P) L4

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=> duplicate remove l5
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
L6          2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)
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=> d 16 1-2 ibib abs

L6 ANSWER 1 OF 2 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2001466767 MEDLINE
DOCUMENT NUMBER: 21402890 PubMed ID: 11397804
TITLE: Depolarization strongly induces human cytomegalovirus major immediate-early promoter/enhancer activity in neurons.
AUTHOR: Wheeler D G; Cooper E
CORPORATE SOURCE: Department of Physiology, McGill University, Montreal, Quebec H3G 1Y6, Canada.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2001 Aug 24) 276 (34) 31978-85.
PUB. COUNTRY: Journal code: 2985121R. ISSN: 0021-9258.
United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
ENTRY MONTH: Priority Journals
200109
ENTRY DATE: Entered STN: 20010821
Last Updated on STN: 20010924
Entered Medline: 20010920
AB Activity-dependent changes in gene expression involving the

transcription ***factor*** cAMP-response element-binding protein (CREB) occur in learning and memory, pain, and drug addiction. This mechanism may also be important for cytomegaloviral infections of the brain. The human cytomegalovirus major immediate-early promoter/enhancer (hCMV promoter), rate-limiting for productive cytomegalovirus infection, contains five cAMP-response elements (CREs). Indirect evidence suggests that this promoter does not function in unstimulated neurons. Here we test the hypothesis that expression from the hCMV promoter in neurons is induced by membrane depolarization. For these experiments, we infected cultured sympathetic and hippocampal neurons with hCMV-green fluorescent protein (GFP) promoter/reporter constructs using adenoviral gene transfer techniques and measured ***transgene*** expression by quantifying GFP fluorescence and GFP mRNA levels. We found that depolarization up-regulates promoter activity by >90-fold. Moreover, our results from pharmacological experiments suggest that this induction occurred through a CREB-dependent pathway. Importantly, site-directed mutagenesis of all five CREs in the promoter blocked this up-regulation almost completely, whereas mutating four of them had no effect. We conclude that the hCMV promoter acts as a ***molecular*** ***switch*** in neurons and is strongly induced by membrane depolarization, neuronal activity, or other stimuli that activate CREB. These results may provide insight into molecular mechanisms of cytomegalovirus-related diseases of the brain.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:628284 CAPLUS

DOCUMENT NUMBER: 133:233573

TITLE: Inducible regulatory systems for control of gene expression

INVENTOR(S): Lim, Moon Young; Edwards, Cynthia A.; Fry, Kirk E.; Bruice, Thomas W.; Starr, Douglas B.; Laurance, Megan E.; Kwok, Yan

PATENT ASSIGNEE(S): Genelabs Technologies, Inc., USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000052179	A2	20000908	WO 2000-US5728	20000303
WO 2000052179	A3	20001221		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1165808	A2	20020102	EP 2000-913742	20000303
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: US 1999-122513P P 19990303
US 1999-154605P P 19990917
WO 2000-US5728 W 20000303

AB Inducible gene expression systems regulated by a ligand are described.

The system includes a nucleic acid construct which has a DNA response sequence for a ***transcriptional*** ***regulatory***

protein operably linked to a promoter, a compd. binding sequence in the vicinity of the DNA response sequence, a ***transgene*** under the control of the promoter; and a DNA binding compd. In some cases, the

mol . ***switch*** system further includes a nucleic acid sequence encoding a ***transcriptional*** ***regulatory***

protein operably linked to a second promoter. The invention further provides a method for screening compds. for the ability to function in the ***mol*** . ***switch*** system and thereby regulate gene expression.

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L4 64328 S TRANSGENE
L5 5 S L3 (P) L4
L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> s gene expression
4 FILES SEARCHED...

L7 861966 GENE EXPRESSION

=> s 12 (p) 17
L8 44711 L2 (P) L7

=> s 18 (p) 14
L9 626 L8 (P) L4

=> s DNA binding compound
L10 223 DNA BINDING COMPOUND

=> s 19 (p) 110
L11 1 L9 (P) L10

=> s 111 1 ibib abs
MISSING OPERATOR L11 1 IBIB

The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d 111 1 ibib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:628284 CAPLUS
DOCUMENT NUMBER: 133:233573
TITLE: Inducible regulatory systems for control of gene
expression
INVENTOR(S): Lim, Moon Young; Edwards, Cynthia A.; Fry, Kirk E.;
Bruice, Thomas W.; Starr, Douglas B.; Laurance, Megan
E.; Kwok, Yan
PATENT ASSIGNEE(S): Genelabs Technologies, Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000052179	A2	20000908	WO 2000-US5728	20000303
WO 2000052179	A3	20001221		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1165808	A2	20020102	EP 2000-913742	20000303
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PRIORITY APPLN. INFO.: US 1999-122513P P 19990303
US 1999-154605P P 19990917
WO 2000-US5728 W 20000303

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L12 1 L3 (P) L10

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L12 1 S L3 (P) L10
L13 0 S L12 NOT L11

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	47.09	47.30
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.24	-1.24

STN INTERNATIONAL LOGOFF AT 15:04:40 ON 08 JUL 2002